
APPENDIX C

Emissions, Air Quality, and Health Risk for Ten Toxic Air Contaminants

Appendix C: Emissions, Air Quality, and Health Risk for Ten Toxic Air Contaminants

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Introduction

This appendix contains TAC emissions data for all counties in California. It also contains air quality and health risk data for the state as a whole, the five most populous air basins, and individual sites within these air basins. The five basins are the South Coast Air Basin, San Francisco Bay Area Air Basin, San Joaquin Valley Air Basin, San Diego Air Basin, and Sacramento Valley Air Basin. It is important to note that some counties are located in more than one air basin. For these counties, the data are provided for that portion of the county located in each air basin. The ten toxic air contaminants (TACs) presented here are the same as the TACs discussed in Chapter 5: acetaldehyde, benzene, 1,3-butadiene, carbon tetrachloride, hexavalent chromium, *para*-Dichlorobenzene, formaldehyde, methylene chloride, perchloroethylene, and diesel particulate matter (diesel PM). Based on available data, these TACs pose the most substantial ambient health risks in California. There may be other TACs that pose a substantial risk, but for which data are not available.

The countywide emissions data represent tons per year from the 2006 emission inventory year. The data for stationary sources include emissions data from the air toxics “Hot Spots” Program. The toxic air contaminant emissions for each area-wide and mobile source category are calculated by applying a speciation profile, maintained by ARB staff, to the total organic gas and total particulate matter criteria pollutant emissions associated with that category.

For all source categories associated with diesel fuel combustion, all “PM” emitted from these sources was considered “diesel PM.” The area-wide source emission estimates were made by either the local districts or the ARB staff. These estimates have been speciated for toxics. The other mobile source emission estimates are primarily from ARB’s OFFROAD model, speciated for toxics. For the categories not currently included in the model, the emission estimates have been developed by either local districts or ARB staff. Districts may also provide estimates for categories normally developed by ARB staff.

Finally, the on-road mobile source emission estimates are based on the current model, EMFAC 2007. Again, the emission estimates have been speciated for toxics.

Readers may note that the stationary source diesel PM emission estimates differ from those presented in previous editions of the almanac and in the ARB’s October 2000 report entitled: *“Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles”* (Diesel Risk Reduction Plan). This is because they incorporate more recent data and have been calculated with updated methodologies developed for new regulations. These regulations are those that were recommended in the Diesel Risk Reduction Plan. The on-road mobile source emissions cited in the Diesel Risk Reduction Plan are based on an earlier version of EMFAC 2001 (EMFAC1.99(f) 6/26/00) and the other mobile inventory includes revised estimates for ship diesel PM emissions.

In addition to the emissions data, air quality and health risk data are available for 1990 through 2005. It is important to note that the data reflect concentrations measured at a specific location or, in the case of the air basin summary data, spatially averaged concentrations. Therefore, the ambient concentrations and health risks for other locations may be higher or lower. TAC air quality data are also collected by the local air districts and for special studies. However, for consistency, only data collected by the ARB are included here.

County Emissions (tons/year) for Ten Toxic Air Contaminants by Air Basin**Great Basin Valleys Air Basin**

TAC	Alpine	Inyo	Mono
Acetaldehyde	4	28	28
Benzene	6	39	15
1,3-Butadiene	1	10	6
Carbon Tetrachloride	0	0	0
Chromium, Hexavalent	< .01	< .01	< .01
para-Dichlorobenzene	< 1	< 1	< 1
Formaldehyde	9	57	43
Methylene Chloride	< 1	2	1
Perchloroethylene	< 1	2	2
Diesel PM	6	51	36

Table C-1

Lake County Air Basin

TAC	Lake
Acetaldehyde	49
Benzene	82
1,3-Butadiene	65
Carbon Tetrachloride	0
Chromium, Hexavalent	< .01
para-Dichlorobenzene	3
Formaldehyde	101
Methylene Chloride	8
Perchloroethylene	9
Diesel PM	51

Table C-2

Lake Tahoe Air Basin

TAC	El Dorado ¹	Placer ¹
Acetaldehyde	42	21
Benzene	24	11
1,3-Butadiene	7	3
Carbon Tetrachloride	< .01	0
Chromium, Hexavalent	< .01	< .01
para-Dichlorobenzene	2	< 1
Formaldehyde	74	30
Methylene Chloride	5	4
Perchloroethylene	5	2
Diesel PM	42	14

Table C-3

¹ This Air Basin includes only a portion of this county.

County Emissions (tons/year) for Ten Toxic Air Contaminants by Air Basin

Mojave Desert Air Basin

TAC	Kern ¹	Los Angeles ¹	Riverside ¹	San Bernardino ¹
Acetaldehyde	189	92	57	387
Benzene	113	91	23	425
1,3-Butadiene	59	21	4	109
Carbon Tetrachloride	0.01	< .01	0	0.03
Chromium, Hexavalent	0.29	0.03	< .01	0.02
para-Dichlorobenzene	6	14	1	19
Formaldehyde	495	219	117	915
Methylene Chloride	16	103	5	79
Perchloroethylene	16	39	4	94
Diesel PM	583	334	351	1759

Table C-4

¹ This Air Basin includes only a portion of this county.

Mountain Counties Air Basin

TAC	Amador	Calaveras	El Dorado	Mariposa	Nevada	Placer ¹	Plumas	Sierra	Tuolumne
Acetaldehyde	32	49	86	27	122	40	51	14	63
Benzene	28	64	73	40	68	38	54	36	88
1,3-Butadiene	7	26	18	15	20	22	84	25	99
Carbon Tetrachloride	0	0	0	0	0	0	0	0	0
Chromium, Hexavalent	< .01	< .01	< .01	< .01	< .01	< .01	< .01	< .01	< .01
para-Dichlorobenzene	1	2	6	< 1	4	1	< 1	< 1	2
Formaldehyde	53	92	135	52	185	81	91	36	129
Methylene Chloride	5	5	17	2	21	7	2	< 1	9
Perchloroethylene	5	3	18	2	6	4	3	< 1	8
Diesel PM	27	41	43	13	145	139	46	5	52

Table C-5

¹ This Air Basin includes only a portion of this county.

North Central Coast Air Basin

TAC	Monterey	San Benito	Santa Cruz
Acetaldehyde	119	36	75
Benzene	179	28	87
1,3-Butadiene	74	17	16
Carbon Tetrachloride	0	0	< .01
Chromium, Hexavalent	< .01	< .01	< .01
para-Dichlorobenzene	17	2	11
Formaldehyde	279	76	141
Methylene Chloride	73	9	56
Perchloroethylene	60	8	38
Diesel PM	346	180	127

Table C-6

County Emissions (tons/year) for Ten Toxic Air Contaminants by Air Basin

North Coast Air Basin

TAC	Del Norte	Humboldt	Mendocino	Sonoma ¹	Trinity
Acetaldehyde	20	92	79	30	24
Benzene	13	77	64	41	25
1,3-Butadiene	31	77	16	9	87
Carbon Tetrachloride	0	0	0	0	0
Chromium, Hexavalent	< .01	< .01	0.01	< .01	< .01
para-Dichlorobenzene	1	5	4	2	< 1
Formaldehyde	31	155	138	62	43
Methylene Chloride	4	18	13	13	2
Perchloroethylene	4	18	14	9	2
Diesel PM	18	187	183	78	37

Table C-7

¹ This Air Basin includes only a portion of this county.

Northeast Plateau Air Basin

TAC	Lassen	Modoc	Siskiyou
Acetaldehyde	53	24	101
Benzene	43	9	58
1,3-Butadiene	26	22	98
Carbon Tetrachloride	0	0	0
Chromium, Hexavalent	< .01	< .01	< .01
para-Dichlorobenzene	1	< 1	2
Formaldehyde	88	40	169
Methylene Chloride	4	1	6
Perchloroethylene	5	1	6
Diesel PM	58	48	259

Table C-8

Outer Continental Shelf Air Basin

TAC	Del Norte	Humboldt	Los Angeles	Marin	Mendocino	Monterey	Orange	San Diego	San Francisco	San Luis Obispo	San Mateo	Santa Barbara	Santa Cruz	Sonoma	Ventura
Acetaldehyde	0	5	41	0	3	9	0	20	1	4	1	11	0	3	11
Benzene	1	4	16	1	3	6	1	7	2	4	6	49	1	2	7
1,3-Butadiene	< 1	< 1	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0	1
Carbon Tetrachloride	0	0	0	0	0	0	0	0	0	0	0	< .01	0	0	0
Chromium (Hexavalent)	< .01	< .01	< .01	< .01	< .01	< .01	< .01	< .01	< .01	< .01	< .01	< .01	< .01	0.00	0.00
para-Dichlorobenzene	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Formaldehyde	< 1	10	83	< 1	7	18	< 1	40	3	8	2	55	< 1	6	24
Methylene Chloride	0	0	0	0	0	0	0	0	0	0	0	< 1	0	0	0
Perchloroethylene	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0
Diesel PM	125	351	734	112	303	474	150	570	211	364	697	2003	124	150	418

Table C-9

County Emissions (tons/year) for Ten Toxic Air Contaminants by Air Basin

Sacramento Valley Air Basin

TAC	Butte	Colusa	Glenn	Placer ¹	Sacramento	Shasta	Solano ¹	Sutter	Tehama	Yolo	Yuba
Acetaldehyde	119	29	31	95	270	177	71	55	75	76	49
Benzene	100	40	32	103	325	139	72	71	44	65	48
1,3-Butadiene	59	14	30	21	64	57	15	9	72	20	16
Carbon Tetrachloride	0	0	0	0	0.05	0	0	0	<.01	0	0
Chromium, Hexavalent	<.01	<.01	<.01	<.01	0.01	<.01	<.01	<.01	<.01	<.01	<.01
para-Dichlorobenzene	9	<1	1	10	55	7	5	4	2	8	3
Formaldehyde	236	89	60	206	583	320	155	135	130	158	120
Methylene Chloride	31	2	3	57	182	21	19	10	7	26	7
Perchloroethylene	28	3	4	33	251	24	14	12	8	25	9
Diesel PM	284	130	125	180	792	377	327	252	254	369	68

Table C-10

¹ This Air Basin includes only a portion of this county.

Salton Sea Air Basin

TAC	Imperial	Riverside ¹
Acetaldehyde	113	129
Benzene	163	98
1,3-Butadiene	27	22
Carbon Tetrachloride	0	<.01
Chromium, Hexavalent	0.06	<.01
para-Dichlorobenzene	7	16
Formaldehyde	273	281
Methylene Chloride	19	69
Perchloroethylene	22	51
Diesel PM	451	807

Table C-11

¹ This Air Basin includes only a portion of this county.

San Diego Air Basin

TAC	San Diego
Acetaldehyde	589
Benzene	869
1,3-Butadiene	241
Carbon Tetrachloride	0.09
Chromium, Hexavalent	0.23
para-Dichlorobenzene	122
Formaldehyde	1426
Methylene Chloride	367
Perchloroethylene	422
Diesel PM	2083

Table C-12

County Emissions (tons/year) for Ten Toxic Air Contaminants by Air Basin**San Francisco Bay Area Air Basin**

TAC	Alameda	Contra Costa	Marin	Napa	San Francisco	San Mateo	Santa Clara	Solano ¹	Sonoma ¹
Acetaldehyde	381	209	56	44	146	156	298	122	107
Benzene	389	293	97	70	162	192	395	108	130
1,3-Butadiene	74	50	22	29	30	47	78	39	26
Carbon Tetrachloride	< .01	0.93	< .01	< .01	0	< .01	< .01	< .01	< .01
Chromium, Hexavalent	0.01	< .01	< .01	< .01	< .01	0.01	0.02	0.02	< .01
para-Dichlorobenzene	61	40	11	5	33	30	71	12	17
Formaldehyde	816	528	126	99	315	374	682	333	214
Methylene Chloride	216	123	33	17	106	103	265	35	65
Perchloroethylene	169	88	33	14	88	85	172	24	37
Diesel PM	1584	713	121	111	537	337	863	181	249

Table C-13

¹ This Air Basin includes only a portion of this county.**San Joaquin Valley Air Basin**

TAC	Fresno	Kern ¹	Kings	Madera	Merced	San Joaquin	Stanislaus	Tulare
Acetaldehyde	351	393	148	87	159	286	168	169
Benzene	314	655	88	80	103	245	144	159
1,3-Butadiene	108	56	38	28	24	51	40	156
Carbon Tetrachloride	0	0	0	0	0	0	0	0
Chromium, Hexavalent	0.04	0.02	0.12	< .01	< .01	0.01	< .01	< .01
para-Dichlorobenzene	36	25	6	6	10	27	21	17
Formaldehyde	746	1392	413	178	333	617	361	356
Methylene Chloride	121	68	15	16	27	75	61	46
Perchloroethylene	159	93	28	22	33	111	81	61
Diesel PM	1519	2099	445	343	825	1213	638	613

Table C-14

¹ This Air Basin includes only a portion of this county.**South Central Coast Air Basin**

TAC	San Luis Obispo	Santa Barbara	Ventura
Acetaldehyde	100	139	181
Benzene	124	214	297
1,3-Butadiene	55	58	70
Carbon Tetrachloride	0	< .01	0.05
Chromium, Hexavalent	< .01	< .01	0.03
para-Dichlorobenzene	11	17	33
Formaldehyde	225	346	466
Methylene Chloride	44	107	161
Perchloroethylene	34	61	83
Diesel PM	215	355	575

Table C-15

County Emissions (tons/year) for Ten Toxic Air Contaminants by Air Basin

South Coast Air Basin

TAC	Los Angeles ¹	Orange	Riverside ¹	San Bernardino ¹
Acetaldehyde	1343	420	249	290
Benzene	2143	683	353	400
1,3-Butadiene	437	135	84	110
Carbon Tetrachloride	0.07	0.54	0.09	0.06
Chromium, Hexavalent	0.07	0.02	0.01	< .01
para-Dichlorobenzene	383	121	59	60
Formaldehyde	3350	1064	584	669
Methylene Chloride	2078	938	226	271
Perchloroethylene	1263	419	199	212
Diesel PM	6525	1587	1058	1075

Table C-16

¹ This Air Basin includes only a portion of this county.

Air Quality and Health Risk

The air quality and health risk data in the following tables cover the time period of 1990 through 2006. Annual average concentrations and health risks are listed at the statewide level, the air basin level, and site level for California's five most populous air basins. The ten TACs presented here are ones that pose the most substantial ambient health risk in California based on available data: acetaldehyde, benzene, 1,3-butadiene, carbon tetrachloride, hexavalent chromium, *para*-dichlorobenzene, formaldehyde, methylene chloride, perchloroethylene, and diesel PM. It is important to note that there may be other compounds that pose a substantial risk, but for which data are not available.

The ambient data for all TACs except diesel PM are based on concentrations measured at sites in California's TAC monitoring network. In order to calculate a valid annual average (a mean of monthly means), each month during the year must have at least one valid measurement. Therefore, if there are no valid data in any given month, data for the year will appear to be missing, even though some data may be available. The associated health risk is based on the annual average concentration and represents the estimated number of excess cancer cases per million people exposed to the specified concentration for 70 years.

For diesel PM, the ARB previously made a preliminary estimation of concentrations for the State's 15 air basins using a PM-based exposure method. The method uses the ARB emission inventory's PM₁₀ database, ambient PM₁₀ monitoring data, and the results from several studies with chemical speciation of ambient data. These data were used, along with receptor modeling techniques, to estimate statewide outdoor concentrations of diesel PM. Details on the method and the resulting estimates can be found in the ARB report entitled: "Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles," (October 2000).

Numerous factors influence the ambient TAC measurements, and a number of assumptions are embodied in the summary statistics. These factors are described in Chapter 1 under the heading "Interpreting the Emission and Air Quality Statistics." These factors must be considered when using the statistics presented here. Finally, it is important to note that the data provided reflect concentrations measured at a specific location or, in the case of the air basin summary data, spatially averaged concentrations. The ambient concentrations and health risks for other locations may be higher or lower.

California

Statewide Summary

TAC	Conc. ¹ /Risk ²	Annual Average Concentrations and Health Risks																	
		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	
Acetaldehyde	Annual Avg	1.73	1.97	1.54	1.76	1.52	0.61	1.34	1.16	1.08	1.29	1	1.1	1.18	1.19	1.12	1.32	1.03	
	Health Risk	8	10	7	9	7	3	6	6	5	6	5	5	6	6	5	6	5	
Benzene	Annual Avg	2.57	2.14	1.71	1.5	1.58	1.31	0.93	0.85	0.86	0.85	0.71	0.608	0.625	0.565	0.461	0.478	0.41	
	Health Risk	238	198	158	139	146	121	86	79	80	79	66	56	58	52	43	44	38	
1,3-Butadiene	Annual Avg	0.412	0.341	0.32	0.392	0.343	0.31	0.262	0.234	0.245	0.225	0.183	0.174	0.172	0.117	0.107	0.101	0.085	
	Health Risk	155	128	120	147	129	117	99	88	92	85	69	65	65	44	40	38	32	
Carbon Tetrachloride	Annual Avg	0.131	0.128		0.106		0.1	0.078		0.114		0.094	0.087	0.091	0.094				
	Health Risk	34	34		28		26	21		30		25	23	24	25				
Chromium, Hexavalent	Annual Avg			0.27	0.22	0.21	0.29	0.13	0.12	0.11	0.11	0.13	0.13	0.101	0.094	0.088	0.091	0.079	
	Health Risk			40	33	31	43	20	18	17	17	19	19	15	14	13	14	12	
para-Dichlorobenzene	Annual Avg		0.14	0.14	0.14	0.13	0.14	0.12	0.14			0.12	0.14	0.16	0.16	0.16	0.15	0.15	
	Health Risk		9	9	9	8	9	8	9			8	10	10	10	10	10	10	
Formaldehyde	Annual Avg	2.18	2.07	1.65	2.08	2.18	2.93	3.38	2.89	2.64	3.2	2.55	3.18	3.5	3.15	2.69	2.86	2.67	
	Health Risk	16	15	12	15	16	22	25	21	19	24	19	23	26	23	20	21	20	
Methylene Chloride	Annual Avg	1.09	1.27	0.75	0.93	0.79	0.77	0.66	0.66	0.62	0.66	0.67	0.36	0.28	0.28	0.25	0.25	0.18	
	Health Risk	4	4	3	3	3	3	2	2	2	2	2	1	1	<1	<1	<1	<1	
Perchloroethylene	Annual Avg	0.277	0.271	0.21	0.27	0.18	0.166	0.134	0.116	0.114		0.115	0.089	0.077	0.057	0.046	0.047	0.039	
	Health Risk	11	11	8	11	7	7	5	5	5		5	4	3	2	2	2	2	
Diesel PM ³	Annual Avg	(3.0)					(2.2)					(1.8)							
	Health Risk	(900)					(660)					(540)							
Average State Risk	w/o Diesel PM	466	409	357	394	347	351	272	228	250	213	218	206	208	177	133	135	119	
	w/ Diesel PM	(1366)					(1011)					(758)							

1 Concentrations for Hexavalent Chromium are expressed as ng/m³, and concentrations for Diesel PM are expressed as µg/m³. Concentrations for all other TACs are expressed as ppb.

2 Health Risk represents the number of excess cancer cases per million people based on a lifetime (70-year) exposure to the annual average concentration. Total Health Risk represents only those compounds listed in this table and only those with data for the year. There may be other significant compounds for which monitoring and/or health risk information are not available.

3 The Diesel PM concentrations are estimates based on receptor modeling, and they are available for selected years. Currently, the Diesel PM estimates are being reviewed.

Table C-17

South Coast Air Basin**Air Basin Summary**

TAC	Conc. ¹ /Risk ²	Annual Average Concentrations and Health Risks																	
		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	
Acetaldehyde	Annual Avg	2.46	3	2.46	2.67	2.3	0.97	2.08	1.77	1.54	1.63	1.26	1.47	1.41	1.47	1.46	1.79	1.17	
	Health Risk	12	15	12	13	11	5	10	9	7	8	6	7	7	7	7	9	6	
Benzene	Annual Avg	3.42	2.91	2.61	2.17	2.4	1.89	1.45	1.34	1.25	1.2	0.97	0.86	0.769	0.745	0.589	0.634	0.504	
	Health Risk	317	269	242	201	222	175	134	124	116	111	90	80	71	69	55	59	47	
1,3-Butadiene	Annual Avg	0.532	0.452	0.498	0.565	0.497	0.459	0.39	0.378	0.354	0.328	0.251	0.251	0.211	0.147	0.143	0.137	0.111	
	Health Risk	200	170	187	212	187	173	146	142	133	123	94	94	79	55	54	51	42	
Carbon Tetrachloride	Annual Avg	0.136	0.134		0.105		0.102	0.079		0.114		0.096	0.086	0.092	0.093				
	Health Risk	36	35		28		27	21		30		25	23	24	25				
Chromium, Hexavalent	Annual Avg			0.39	0.29	0.29	0.46	0.18	0.17	0.15	0.14	0.18		0.179	0.158	0.126	0.139	0.139	
	Health Risk			59	43	43	69	27	25	22	22	27		27	24	19	21	21	
para-Dichlorobenzene	Annual Avg		0.17	0.19	0.17	0.13	0.17	0.11	0.13			0.13	0.15	0.16	0.17	0.16	0.15	0.15	
	Health Risk		11	13	11	8	11	7	9			9	10	11	11	11	10	10	
Formaldehyde	Annual Avg	2.92	3.08	2.22	3.22	3.14	3.57	5.06	4.47	3.79	4.06	3.13	4.13	4.16	3.83	3.76	4.21	3.58	
	Health Risk	22	23	16	24	23	26	37	33	28	30	23	30	31	28	28	31	26	
Methylene Chloride	Annual Avg	1.86	1.51	0.9	1.23	1.1	1.28	0.95	1.14	0.85	0.92	0.83	0.63	0.57	0.59	0.57	0.57	0.32	
	Health Risk	6	5	3	4	4	4	3	4	3	3	3	2	2	2	2	2	1	
Perchloroethylene	Annual Avg	0.576	0.547	0.412	0.448	0.393	0.364	0.32	0.274	0.259		0.207	0.176	0.146	0.105	0.082	0.08	0.062	
	Health Risk	23	22	16	18	16	15	13	11	10		8	7	6	4	3	3	2	
Diesel PM ³	Annual Avg	(3.6)					(2.7)				(2.4)								
	Health Risk						(810)				(720)								
Average Basin Risk	w/o Diesel PM	616	550	548	554	514	505	398	357	349	297	285	253	258	225	179	186	155	
	w/ Diesel PM	(1696)					(1315)				(1005)								

1 Concentrations for Hexavalent Chromium are expressed as ng/m³, and concentrations for Diesel PM are expressed as µg/m³. Concentrations for all other TACs are expressed as ppb.

2 Health Risk represents the number of excess cancer cases per million people based on a lifetime (70-year) exposure to the annual average concentration. Total Health Risk represents only those compounds listed in this table and only those with data for the year. There may be other significant compounds for which monitoring and/or health risk information are not available.

3 The Diesel PM concentrations are estimates based on receptor modeling, and they are available for selected years. Currently, the Diesel PM estimates are being reviewed.

Table C-18

South Coast Air Basin

Los Angeles County: Azusa

TAC	Conc. ¹ /Risk ²	Annual Average Concentrations and Health Risks																			
		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006			
Acetaldehyde	Annual Avg											1.1	1.31		1.25	1.53	1.86				
	Health Risk											5	6		6	7	9				
Benzene	Annual Avg											0.69		0.621	0.598	0.432	0.512	0.376			
	Health Risk											64		57	55	40	47	35			
1,3-Butadiene	Annual Avg											0.146		0.135	0.076	0.076	0.078	0.061			
	Health Risk											55		51	29	29	29	23			
Carbon Tetrachloride	Annual Avg											0.093		0.09	0.095						
	Health Risk											24		24	25						
Chromium, Hexavalent	Annual Avg											0.12			0.09	0.073	0.08				
	Health Risk											19			14	11	12				
para-Dichlorobenzene	Annual Avg											0.1		0.15	0.15	0.15	0.15	0.15			
	Health Risk											7		10	10	10	10	10			
Formaldehyde	Annual Avg											3.05	3.8		3.45	3.04	3.62				
	Health Risk											22	28		25	22	27				
Methylene Chloride	Annual Avg											1.32		1	0.96	1.43	1.26	0.56			
	Health Risk											5		3	3	5	4	2			
Perchloroethylene	Annual Avg											0.183		0.153	0.109	0.063	0.076	0.05			
	Health Risk											7		6	4	3	3	2			
Diesel PM	Annual Avg																				
	Health Risk																				
Total Health Risk															208	34	151	171	127	141	72

1 Concentrations for Hexavalent Chromium are expressed as ng/m³, and concentrations for Diesel PM are expressed as µg/m³. Concentrations for all other TACs are expressed as ppb.

2 Health Risk represents the number of excess cancer cases per million people based on a lifetime (70-year) exposure to the annual average concentration. Total Health Risk represents only those compounds listed in this table and only those with data for the year. There may be other significant compounds for which monitoring and/or health risk information are not available.

Table C-19

Appendix C

South Coast Air Basin

Los Angeles County: Burbank - West Palm Avenue

TAC	Conc. ¹ /Risk ²	Annual Average Concentrations and Health Risks																
		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Acetaldehyde	Annual Avg	3.16	3.89		3.06	2.46	0.79			1.94	2.7	1.7	1.93	1.96		1.77	2.15	1.74
	Health Risk	15	19		15	12	4			9	13	8	9	10		9	10	8
Benzene	Annual Avg	4.79	3.91	3.44	2.63	3.33	2.45	1.91	1.48	1.66	1.64	1.27	1.06	1.01		0.754	0.832	0.689
	Health Risk	444	362	319	244	308	227	177	137	154	151	117	98	93		70	77	64
1,3-Butadiene	Annual Avg	0.782	0.623	0.725	0.749	0.752	0.605	0.512	0.421	0.483	0.483	0.345	0.328	0.283		0.18	0.196	0.169
	Health Risk	294	234	272	282	283	227	192	158	182	181	130	123	106		68	74	64
Carbon Tetrachloride	Annual Avg	0.141	0.133				0.104	0.082		0.114		0.094	0.086	0.091				
	Health Risk	37	35				28	22		30		25	23	24				
Chromium, Hexavalent	Annual Avg			0.65	0.37	0.43	1.24			0.23	0.2	0.19		0.123		0.113	0.113	0.115
	Health Risk			97	55	64	186			34	29	28		18		17	17	17
para-Dichlorobenzene	Annual Avg	0.23	0.22	0.19	0.14	0.2	0.1	0.11			0.13	0.15	0.17		0.17	0.15	0.15	
	Health Risk	15	15	12	9	13	7	7			8	10	11		11	10	10	
Formaldehyde	Annual Avg	4.05	3.59		3.66	3.92	4.58			4.72	6.07	4.14	4.87	5.48		3.85	4.42	3.95
	Health Risk	30	26		27	29	34			35	45	30	36	40		28	33	29
Methylene Chloride	Annual Avg	3.25	1.69	1.42	2.01	1.94	1.82	1.41	1.11	1.07		0.8	0.6	0.6		0.41	0.42	0.3
	Health Risk	11	6	5	7	7	6	5	4	4		3	2	2		1	1	1
Perchloroethylene	Annual Avg	1.19	0.785	0.609	0.62	0.663	0.487	0.44	0.365	0.503		0.368	0.296	0.247		0.151	0.135	0.094
	Health Risk	48	31	24	25	26	19	18	15	20		15	12	10		6	5	4
Diesel PM	Annual Avg	No Monitoring Data Available																
Total Health Risk		879	728	732	667	738	744	421	321	468	419	364	313	314		210	227	197

1 Concentrations for Hexavalent Chromium are expressed as ng/m³, and concentrations for Diesel PM are expressed as µg/m³. Concentrations for all other TACs are expressed as ppb.

2 Health Risk represents the number of excess cancer cases per million people based on a lifetime (70-year) exposure to the annual average concentration. Total Health Risk represents only those compounds listed in this table and only those with data for the year. There may be other significant compounds for which monitoring and/or health risk information are not available.

Table C-20

South Coast Air Basin

Los Angeles County: North Main Street

TAC	Conc. ¹ /Risk ²	Annual Average Concentrations and Health Risks																
		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Acetaldehyde	Annual Avg	2.68	2.78	2.5	2.89	2.35	1.28	2.33			1.43	0.84	1.45	1.3	1.39	1.24	1.84	1.19
	Health Risk	13	13	12	14	11	6	11			7	4	7	6	7	6	9	6
Benzene	Annual Avg	3.5	3.25	2.97	2.54	2.45	2.24	1.86		1.36	1.5	1.04	1.03		0.853	0.677	0.722	
	Health Risk	324	301	275	235	227	207	173		126	139	97	95		79	63	67	
1,3-Butadiene	Annual Avg	0.6	0.547	0.643	0.733	0.588	0.599	0.542		0.421	0.432	0.296	0.313		0.186	0.195	0.164	
	Health Risk	226	206	242	276	221	225	204		158	162	111	118		70	73	62	
Carbon Tetrachloride	Annual Avg	0.138	0.134				0.103	0.079		0.112		0.098	0.086		0.095			
	Health Risk	36	35				27	21		30		26	23		25			
Chromium, Hexavalent	Annual Avg			0.24	0.27	0.23	0.17			0.11	0.13		0.133	0.07		0.125	0.105	
	Health Risk			36	40	35	25			16	19		20	11		19	16	
para-Dichlorobenzene	Annual Avg	0.19	0.22	0.19	0.16	0.19	0.12				0.16	0.17		0.16	0.17	0.15		
	Health Risk	13	14	12	10	13	8				11	11		10	11	10		
Formaldehyde	Annual Avg	3.5	3	2.3	3.23	3.54	4.13	5.87			3.88	2.42	4.3	4.32	3.79	5.69	6.64	6.69
	Health Risk	26	22	17	24	26	30	43			29	18	32	32	28	42	49	49
Methylene Chloride	Annual Avg	1.28	2.72	0.68	1.05	1.06	1.51	1.1		0.8	1.2	0.68	0.74		0.59	0.5	0.44	
	Health Risk	4	9	2	4	4	5	4		3	4	2	3		2	2	2	
Perchloroethylene	Annual Avg	0.551	0.603	0.536	0.588	0.503	0.574	0.502		0.232		0.187	0.177		0.109	0.088	0.087	
	Health Risk	22	24	21	24	20	23	20		9		7	7		4	4	3	
Diesel PM	Annual Avg																	
	Health Risk																	
Total Health Risk		651	623	583	625	559	571	509		326	357	295	296	58	236	201	221	71

1 Concentrations for Hexavalent Chromium are expressed as ng/m³, and concentrations for Diesel PM are expressed as µg/m³. Concentrations for all other TACs are expressed as ppb.

2 Health Risk represents the number of excess cancer cases per million people based on a lifetime (70-year) exposure to the annual average concentration. Total Health Risk represents only those compounds listed in this table and only those with data for the year. There may be other significant compounds for which monitoring and/or health risk information are not available.

Table C-21

Appendix C

South Coast Air Basin

Los Angeles County: North Long Beach

TAC	Conc. ¹ /Risk ²	Annual Average Concentrations and Health Risks																
		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Acetaldehyde	Annual Avg	2.49	2.52		2.36	2.18	0.81		1.43			1.16	1.11		1.06	1.19	1.39	0.91
	Health Risk	12	12		11	11	4		7			6	5		5	6	7	4
Benzene	Annual Avg	3.53	2.45	2.6	1.99	2.04	1.69		1.24	1.16	1.11	1		0.705	0.705	0.554		0.484
	Health Risk	327	227	241	185	188	157		115	108	103	92		65	65	51		45
1,3-Butadiene	Annual Avg	0.592	0.439	0.523	0.575	0.447	0.448		0.364	0.339	0.323	0.278		0.198	0.142	0.144		0.113
	Health Risk	223	165	197	216	168	169		137	127	121	104		75	53	54		42
Carbon Tetrachloride	Annual Avg	0.139	0.129				0.099			0.118		0.097		0.092	0.092			
	Health Risk	37	34				26			31		26		24	24			
Chromium, Hexavalent	Annual Avg			0.44	0.34	0.22	0.25		0.15	0.11	0.12	0.12		0.078		0.09	0.1	0.088
	Health Risk			66	51	33	38		22	16	18	18		12		14	15	13
para-Dichlorobenzene	Annual Avg	0.17	0.26	0.19	0.12	0.17			0.16			0.13		0.18	0.2	0.15		0.15
	Health Risk		11	17	13	8	11		10			8		12	13	10		10
Formaldehyde	Annual Avg	2.97	2.76		3.22	3.06	3.29		3.68			2.88	2.96		2.79	2.78	2.91	2.41
	Health Risk	22	20		24	23	24		27			21	22		21	20	21	18
Methylene Chloride	Annual Avg	2.05	0.88	1	1.15	0.84	0.98		0.74	0.6		0.65		0.27	0.31	0.24		0.21
	Health Risk	7	3	3	4	3	3		3	2		2		<1	1	<1		<1
Perchloroethylene	Annual Avg	0.477	0.355	0.349	0.433	0.321	0.318		0.227	0.193		0.168		0.095	0.076	0.057		0.054
	Health Risk	19	14	14	17	13	13		9	8		7		4	3	2		2
Diesel PM	Annual Avg																	
	Health Risk																	
Total Health Risk		647	486	538	521	447	445		330	292	242	284	27	192	185	157	43	134

¹ Concentrations for Hexavalent Chromium are expressed as ng/m³, and concentrations for Diesel PM are expressed as µg/m³. Concentrations for all other TACs are expressed as ppb.

² Health Risk represents the number of excess cancer cases per million people based on a lifetime (70-year) exposure to the annual average concentration. Total Health Risk represents only those compounds listed in this table and only those with data for the year. There may be other significant compounds for which monitoring and/or health risk information are not available.

South Coast Air Basin

Riverside County: Riverside - Rubidoux

Annual Average Concentrations and Health Risks																		
TAC	Conc. ¹ /Risk ²	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Acetaldehyde	Annual Avg	1.87	2.54	1.86	2.19	2.08	0.89	1.84			1.36	1.49	1.58	1.66	1.66	1.59	1.7	0.97
	Health Risk	9	12	9	11	10	4	9			7	7	8	8	8	8	8	5
Benzene	Annual Avg	2.55	2.22	1.9	1.77	2.01	1.45	1.03			0.87	0.85	0.685		0.623	0.526	0.505	0.42
	Health Risk	236	206	176	164	186	134	95			80	79	63		58	49	47	39
1,3-Butadiene	Annual Avg	0.34	0.312	0.292	0.379	0.363	0.332	0.267			0.208	0.193	0.175		0.118	0.121	0.112	0.083
	Health Risk	128	117	110	143	136	125	100			78	72	66		44	45	42	31
Carbon Tetrachloride	Annual Avg	0.131	0.136				0.102	0.079				0.096	0.086		0.093			
	Health Risk	34	36				27	21				25	23		24			
Chromium, Hexavalent	Annual Avg		0.33	0.33	0.36	0.38	0.22				0.19	0.35		0.41	0.348			
	Health Risk		50	50	55	56	33				29	52		62	52			
para-Dichlorobenzene	Annual Avg	0.13	0.13	0.16	0.12	0.17	0.11					0.14	0.15		0.17	0.16	0.15	0.15
	Health Risk		9	8	10	8	11	7				9	10		12	11	10	10
Formaldehyde	Annual Avg	1.75	2.7	1.53	2.73	2.5	2.65	4.15			3.55	3.17	4.73	4.36	4.18	3.46	3.47	2.55
	Health Risk	13	20	11	20	18	19	31			26	23	35	32	31	25	26	19
Methylene Chloride	Annual Avg	0.69	0.6	1.1	0.93	0.98	0.83				0.58	0.69	0.44		0.45	0.29	0.3	0.18
	Health Risk		2	2	4	3	3	3			2	2	2		2	1	1	<1
Perchloroethylene	Annual Avg	0.237	0.276	0.201	0.198	0.191	0.177	0.175				0.129	0.112		0.06	0.051	0.046	0.038
	Health Risk	9	11	8	8	8	7	7				5	4		2	2	2	1
Diesel PM	Annual Avg	No Monitoring Data Available																
Total Health Risk		429	413	374	410	424	386	306			222	274	211	102	233	141	136	105

1 Concentrations for Hexavalent Chromium are expressed as ng/m³, and concentrations for Diesel PM are expressed as µg/m³. Concentrations for all other TACs are expressed as ppb.

2 Health Risk represents the number of excess cancer cases per million people based on a lifetime (70-year) exposure to the annual average concentration. Total Health Risk represents only those compounds listed in this table and only those with data for the year. There may be other significant compounds for which monitoring and/or health risk information are not available.

Table C-23

South Coast Air Basin**San Bernardino County: Fontana - Arrow Highway**

		Annual Average Concentrations and Health Risks																	
TAC	Conc. ¹ /Risk ²	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	
Acetaldehyde	Annual Avg																		
	Health Risk																		
Benzene	Annual Avg										0.98								
	Health Risk										91								
1,3-Butadiene	Annual Avg										0.244								
	Health Risk										92								
Carbon Tetrachloride	Annual Avg										0.114								
	Health Risk										30								
Chromium, Hexavalent	Annual Avg																		
	Health Risk																		
para-Dichlorobenzene	Annual Avg																		
	Health Risk																		
Formaldehyde	Annual Avg																		
	Health Risk																		
Methylene Chloride	Annual Avg										0.59								
	Health Risk										2								
Perchloroethylene	Annual Avg										0.179								
	Health Risk										7								
Diesel PM	Annual Avg											No Monitoring Data Available							
	Health Risk																		
Total Health Risk											222								

1 Concentrations for Hexavalent Chromium are expressed as ng/m³, and concentrations for Diesel PM are expressed as µg/m³. Concentrations for all other TACs are expressed as ppb.

2 Health Risk represents the number of excess cancer cases per million people based on a lifetime (70-year) exposure to the annual average concentration. Total Health Risk represents only those compounds listed in this table and only those with data for the year. There may be other significant compounds for which monitoring and/or health risk information are not available.

Table C-24

South Coast Air Basin

San Bernardino County: Upland - San Bernardino Road

TAC	Conc. ¹ /Risk ²	Annual Average Concentrations and Health Risks															
		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Acetaldehyde	Annual Avg	2.12	3.28	2.36	2.84	2.42	1.09	2.13									
	Health Risk	10	16	11	14	12	5	10									
Benzene	Annual Avg	2.73	2.7	2.14	1.92	2.15	1.62	1.11	1.11								
	Health Risk	253	250	198	178	199	150	103	103								
1,3-Butadiene	Annual Avg	0.348	0.341	0.308	0.391	0.336	0.312	0.257	0.254								
	Health Risk	131	128	116	147	126	117	97	95								
Carbon Tetrachloride	Annual Avg	0.133	0.137		0.103		0.1	0.075									
	Health Risk	35	36		27		26	20									
Chromium, Hexavalent	Annual Avg			0.22	0.16	0.16	0.2	0.12									
	Health Risk			33	24	24	30	17									
para-Dichlorobenzene	Annual Avg		0.13	0.14	0.14	0.1	0.13	0.1	0.14								
	Health Risk		9	9	9	7	9	7	9								
Formaldehyde	Annual Avg	2.35	3.34	1.98	3.25	2.67	3.21	5.2									
	Health Risk	17	25	15	24	20	24	38									
Methylene Chloride	Annual Avg	1.41	1.59	0.82	0.87	0.72	1.13	0.66	1.7								
	Health Risk	5	6	3	3	3	4	2	6								
Perchloroethylene	Annual Avg	0.423	0.717	0.364	0.398	0.286	0.263	0.199	0.206								
	Health Risk	17	29	15	16	11	11	8	8								
Diesel PM	Annual Avg																
	Health Risk																
Total Health Risk		468	499	400	442	402	376	302	221								

1 Concentrations for Hexavalent Chromium are expressed as ng/m³, and concentrations for Diesel PM are expressed as µg/m³. Concentrations for all other TACs are expressed as ppb.

2 Health Risk represents the number of excess cancer cases per million people based on a lifetime (70-year) exposure to the annual average concentration. Total Health Risk represents only those compounds listed in this table and only those with data for the year. There may be other significant compounds for which monitoring and/or health risk information are not available.

Table C-25

San Francisco Bay Area Air Basin

Air Basin Summary

TAC	Conc. ¹ /Risk ²	Annual Average Concentrations and Health Risks																	
		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	
Acetaldehyde	Annual Avg	1.3	1.4	1.03	1.31	1.17	0.42	0.83	0.73	0.65	0.76	0.68	0.73	0.63	0.74	0.74	0.71	0.66	
	Health Risk	6	7	5	6	6	2	4	4	3	4	3	4	3	4	4	3	3	
Benzene	Annual Avg	2.18	1.82	1.49	1.49	1.4	1.26	0.71	0.61	0.71	0.6	0.56	0.425	0.454	0.439	0.372	0.314	0.326	
	Health Risk	202	169	138	138	129	116	66	56	66	55	52	39	42	41	34	29	30	
1,3-Butadiene	Annual Avg	0.359	0.287	0.275	0.367	0.287	0.277	0.218	0.187	0.217	0.17	0.149	0.133	0.137	0.098	0.09	0.075	0.069	
	Health Risk	135	108	103	138	108	104	82	70	82	64	56	50	51	37	34	28	26	
Carbon Tetrachloride	Annual Avg	0.128	0.125		0.108		0.1	0.078				0.094	0.087	0.089	0.095				
	Health Risk	34	33		29		26	21				25	23	24	25				
Chromium, Hexavalent	Annual Avg			0.23	0.2	0.19	0.25	0.13	0.12	0.1	0.1	0.12		0.074	0.096	0.094	0.08	0.063	
	Health Risk			34	29	29	37	19	17	15	15	18		11	14	14	12	9	
para-Dichlorobenzene	Annual Avg		0.12	0.12	0.12	0.11	0.13	0.14	0.12			0.11	0.14	0.15	0.15	0.17	0.15	0.15	
	Health Risk		8	8	8	7	8	9	8			7	9	10	10	11	10	10	
Formaldehyde	Annual Avg	1.87	1.73	1.43	1.56	1.66	2.06	2.62	1.85	1.76	2.09	1.77	2.32	2.57	2.22	1.71	1.32	1.59	
	Health Risk	14	13	11	11	12	15	19	14	13	15	13	17	19	16	13	10	12	
Methylene Chloride	Annual Avg	1.04	2.32	0.65	0.72	0.59	0.6	0.58	0.55			0.53	0.27	0.22	0.22	0.14	0.13	0.16	
	Health Risk	4	8	2	2	2	2	2	2			2	<1	<1	<1	<1	<1	<1	
Perchloroethylene	Annual Avg	0.204	0.232	0.169	0.128	0.082	0.094	0.067	0.071			0.078	0.059	0.052	0.039	0.035	0.029	0.027	
	Health Risk	8	9	7	5	3	4	3	3			3	2	2	2	1	1	1	
Diesel PM ³	Annual Avg	(2.5)					(1.9)					(1.6)							
	Health Risk	(750)					(570)					(480)							
Average Basin Risk	w/o Diesel PM	403	355	308	366	296	314	225	174	179	153	179	144	162	149	111	93	91	
	w/ Diesel PM	(1153)					(884)					(659)							

1 Concentrations for Hexavalent Chromium are expressed as ng/m³, and concentrations for Diesel PM are expressed as µg/m³. Concentrations for all other TACs are expressed as ppb.

2 Health Risk represents the number of excess cancer cases per million people based on a lifetime (70-year) exposure to the annual average concentration. Total Health Risk represents only those compounds listed in this table and only those with data for the year. There may be other significant compounds for which monitoring and/or health risk information are not available.

3 The Diesel PM concentrations are estimates based on receptor modeling, and they are available for selected years. Currently, the Diesel PM estimates are being reviewed.

Table C-26

San Francisco Bay Area Air Basin

Alameda County: Fremont - Chapel Way

Annual Average Concentrations and Health Risks																		
TAC	Conc. ¹ /Risk ²	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Acetaldehyde	Annual Avg	1.28	1.6	1.02	1.28	1.23	0.35	0.88	0.65	0.72					0.69	0.69	0.71	0.62
	Health Risk	6	8	5	6	6	2	4	3	4					3	3	3	3
Benzene	Annual Avg	1.92	1.67	1.21	1.35	1.25	1.24	0.58		0.76	0.61	0.53	0.439	0.418	0.356	0.286		0.295
	Health Risk	178	155	112	125	116	115	54		71	57	49	41	39	33	26		27
1,3-Butadiene	Annual Avg	0.283	0.259	0.193	0.321	0.252	0.27	0.199		0.238	0.176	0.136	0.132	0.116	0.078	0.049		0.054
	Health Risk	106	97	72	120	95	101	75		90	66	51	50	43	29	19		20
Carbon Tetrachloride	Annual Avg	0.131	0.127		0.105		0.101	0.076				0.095	0.085	0.089	0.096			
	Health Risk	35	34		28		27	20				25	23	24	25			
Chromium, Hexavalent	Annual Avg			0.2	0.19	0.21	0.2	0.11		0.1	0.1	0.1			0.045	0.053	0.05	0.03
	Health Risk			30	28	32	30	16		15	15	16			7	8	8	5
para-Dichlorobenzene	Annual Avg			0.11	0.11	0.1	0.12	0.1				0.1	0.13	0.15	0.16	0.15		0.15
	Health Risk			7	7	7	8	7				7	9	10	11	10		10
Formaldehyde	Annual Avg	1.84	1.98	1.3	1.37	1.78	2.02	2.16	1.79	1.96					2.15	1.46	1.21	1.52
	Health Risk	14	15	10	10	13	15	16	13	14					16	11	9	11
Methylene Chloride	Annual Avg	0.76	0.58	0.52	0.83	0.5	0.62	0.5				0.5	0.28	0.23	0.3	0.1		0.2
	Health Risk	3	2	2	3	2	2	2				2	1	<1	1	<1		<1
Perchloroethylene	Annual Avg	0.189	0.21	0.134	0.114	0.086	0.118	0.069				0.083	0.056	0.05	0.039	0.029		0.024
	Health Risk	8	8	5	5	3	5	3				3	2	2	2	1		<1
Diesel PM	Annual Avg																	
	Health Risk																	
Total Health Risk		350	319	243	332	274	305	197	16	194	138	153	126	118	127	78	20	76

1 Concentrations for Hexavalent Chromium are expressed as ng/m³, and concentrations for Diesel PM are expressed as µg/m³. Concentrations for all other TACs are expressed as ppb.

2 Health Risk represents the number of excess cancer cases per million people based on a lifetime (70-year) exposure to the annual average concentration. Total Health Risk represents only those compounds listed in this table and only those with data for the year. There may be other significant compounds for which monitoring and/or health risk information are not available.

Table C-27

San Francisco Bay Area Air Basin

Contra Costa County: Concord - 2975 Treat Boulevard

		Annual Average Concentrations and Health Risks																
TAC	Conc. ¹ /Risk ²	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Acetaldehyde	Annual Avg	1.41			1.39	1.46	0.62	0.86	0.76		0.87							
	Health Risk	7			7	7	3	4	4		4							
Benzene	Annual Avg	1.84	1.58	1.41	1.13	1.08	1.09	0.48	0.56	0.57	0.57							
	Health Risk	171	147	130	105	100	101	44	52	53	53							
1,3-Butadiene	Annual Avg	0.315	0.265	0.253	0.305	0.232	0.242	0.149	0.176	0.192	0.155							
	Health Risk	118	100	95	114	87	91	56	66	72	58							
Carbon Tetrachloride	Annual Avg	0.13	0.125		0.108		0.102	0.082										
	Health Risk	34	33		29		27	22										
Chromium, Hexavalent	Annual Avg				0.19	0.18	0.21	0.11	0.11		0.1							
	Health Risk				28	27	32	16	17		15							
para-Dichlorobenzene	Annual Avg		0.15	0.13	0.14	0.13	0.13	0.13	0.14									
	Health Risk		10	8	9	9	8	9										
Formaldehyde	Annual Avg	1.99			1.99	1.69	2.21	2.3	2.05		2.64							
	Health Risk	15			15	12	16	17	15		19							
Methylene Chloride	Annual Avg	0.67	0.51	0.66	0.54	0.54	0.55	0.55	0.5									
	Health Risk	2	2	2	2	2	2	2	2									
Perchloroethylene	Annual Avg	0.337	0.419	0.39	0.204	0.098	0.147	0.082	0.102									
	Health Risk	13	17	16	8	4	6	3	4									
Diesel PM	Annual Avg	No Monitoring Data Available																
Total Health Risk		360	299	253	316	248	287	172	169	125	149							

1 Concentrations for Hexavalent Chromium are expressed as ng/m³, and concentrations for Diesel PM are expressed as µg/m³. Concentrations for all other TACs are expressed as ppb.

2 Health Risk represents the number of excess cancer cases per million people based on a lifetime (70-year) exposure to the annual average concentration. Total Health Risk represents only those compounds listed in this table and only those with data for the year. There may be other significant compounds for which monitoring and/or health risk information are not available.

Table C-28

San Francisco Bay Area Air Basin

Contra Costa County: Richmond - 13th Street

TAC	Conc. ¹ /Risk ²	Annual Average Concentrations and Health Risks															
		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Acetaldehyde	Annual Avg			0.78		0.92	0.36	0.59									
	Health Risk			4		4	2	3									
Benzene	Annual Avg	1.92	1.54	1.76	1.7	1.44	1										
	Health Risk	177	143	163	157	133	92										
1,3-Butadiene	Annual Avg	0.272	0.26	0.393	0.308	0.3	0.251										
	Health Risk	102	98	148	116	113	94										
Carbon Tetrachloride	Annual Avg	0.123		0.11		0.097	0.078										
	Health Risk	33		29		25	21										
Chromium, Hexavalent	Annual Avg			0.19		0.15	0.26	0.13									
	Health Risk			28		23	39	19									
para-Dichlorobenzene	Annual Avg	0.14	0.12	0.12	0.1	0.12	0.19										
	Health Risk	9	8	8	7	8	13										
Formaldehyde	Annual Avg			1.08		1.32	2.22	4.27									
	Health Risk			8		10	16	31									
Methylene Chloride	Annual Avg	0.62	0.54	0.67	0.5	0.54	0.65										
	Health Risk	2	2	2	2	2	2										
Perchloroethylene	Annual Avg	0.147	0.093	0.092	0.056	0.043	0.03										
	Health Risk	6	4	4	2	2	1										
Diesel PM	Annual Avg																
	Health Risk																
Total Health Risk		329	295	354	321	340	276										

No Monitoring Data Available

1 Concentrations for Hexavalent Chromium are expressed as ng/m³, and concentrations for Diesel PM are expressed as µg/m³. Concentrations for all other TACs are expressed as ppb.

2 Health Risk represents the number of excess cancer cases per million people based on a lifetime (70-year) exposure to the annual average concentration. Total Health Risk represents only those compounds listed in this table and only those with data for the year. There may be other significant compounds for which monitoring and/or health risk information are not available.

Table C-29

San Francisco Bay Area Air Basin

Contra Costa County: San Pablo - El Portal

TAC	Conc. ¹ /Risk ²	Annual Average Concentrations and Health Risks															
		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Acetaldehyde	Annual Avg										0.55						
	Health Risk										3						
Benzene	Annual Avg									0.56	0.42						
	Health Risk									52	39						
1,3-Butadiene	Annual Avg									0.148	0.118						
	Health Risk									56	45						
Carbon Tetrachloride	Annual Avg																
	Health Risk																
Chromium, Hexavalent	Annual Avg										0.1						
	Health Risk										15						
para-Dichlorobenzene	Annual Avg																
	Health Risk																
Formaldehyde	Annual Avg										1.24						
	Health Risk										9						
Methylene Chloride	Annual Avg																
	Health Risk																
Perchloroethylene	Annual Avg																
	Health Risk																
Diesel PM	Annual Avg																
	Health Risk																
Total Health Risk																	
No Monitoring Data Available																	
108																	
111																	

1 Concentrations for Hexavalent Chromium are expressed as ng/m³, and concentrations for Diesel PM are expressed as µg/m³. Concentrations for all other TACs are expressed as ppb.

2 Health Risk represents the number of excess cancer cases per million people based on a lifetime (70-year) exposure to the annual average concentration. Total Health Risk represents only those compounds listed in this table and only those with data for the year. There may be other significant compounds for which monitoring and/or health risk information are not available.

Table C-30

San Francisco Bay Area Air Basin

San Francisco County: San Francisco - Arkansas Street

TAC	Conc. ¹ /Risk ²	Annual Average Concentrations and Health Risks																
		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Acetaldehyde	Annual Avg	1.32				0.98	0.4		0.75	0.54			0.57	0.54	0.68	0.69	0.65	0.54
	Health Risk	6				5	2		4	3			3	3	3	3	3	3
Benzene	Annual Avg		1.49	1.25		1.07	0.95	0.53	0.51	0.63	0.65	0.48	0.376		0.386	0.329	0.23	0.299
	Health Risk		138	116		99	88	49	48	59	61	45	35		36	30	21	28
1,3-Butadiene	Annual Avg		0.252	0.234		0.259	0.226	0.181	0.165	0.215	0.173	0.128	0.113		0.084	0.083	0.053	0.063
	Health Risk		95	88		97	85	68	62	81	65	48	42		32	31	20	24
Carbon Tetrachloride	Annual Avg		0.124				0.1	0.078					0.095	0.087		0.094		
	Health Risk		33				26	21					25	23		25		
Chromium, Hexavalent	Annual Avg			0.19	0.18	0.25	0.12	0.13	0.1			0.12		0.088	0.145	0.13	0.11	0.105
	Health Risk			29	26	37	18	19	15			18		13	22	20	17	16
para-Dichlorobenzene	Annual Avg	0.15	0.13			0.1	0.15	0.12	0.12				0.11	0.14		0.15	0.19	0.15
	Health Risk	10	9			7	10	8	8				7	9		10	13	10
Formaldehyde	Annual Avg	1.71				1.33	1.58		1.62	1.45			1.51	2.03	1.71	1.54	1.04	1.37
	Health Risk	13				10	12		12	11			11	15	13	11	8	10
Methylene Chloride	Annual Avg	3.22	0.88			0.6	0.63	0.66	0.5				0.6	0.26		0.17	0.17	0.12
	Health Risk	11	3			2	2	2	2				2	<1		<1	<1	<1
Perchloroethylene	Annual Avg	0.229	0.13			0.105	0.092	0.084	0.065				0.068	0.074		0.038	0.04	0.026
	Health Risk	9	5			4	4	3	3				3	3		1	2	1
Diesel PM	Annual Avg																	
	Health Risk																	
Total Health Risk		19	296	221	29	250	266	169	158	169	126	148	126	31	142	110	80	92

1 Concentrations for Hexavalent Chromium are expressed as ng/m³, and concentrations for Diesel PM are expressed as µg/m³. Concentrations for all other TACs are expressed as ppb.

2 Health Risk represents the number of excess cancer cases per million people based on a lifetime (70-year) exposure to the annual average concentration. Total Health Risk represents only those compounds listed in this table and only those with data for the year. There may be other significant compounds for which monitoring and/or health risk information are not available.

Table C-31

Appendix C

San Francisco Bay Area Air Basin

Santa Clara County: San Jose - 4th Street

		Annual Average Concentrations and Health Risks																
TAC	Conc. ¹ /Risk ²	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Acetaldehyde	Annual Avg	1.53	1.55	1.41	1.58	1.27	0.35	1.04	0.97	0.77	0.93	0.79	0.76					
	Health Risk	7	8	7	8	6	2	5	5	4	4	4	4					
Benzene	Annual Avg	3.02	2.44	2.03	1.89	1.88	1.55	0.97	0.93	1.04	0.73	0.7						
	Health Risk	280	226	188	175	174	144	89	86	97	68	65						
1,3-Butadiene	Annual Avg	0.549	0.385	0.436	0.485	0.385	0.348	0.311	0.287	0.293	0.227	0.193						
	Health Risk	207	145	164	182	145	131	117	108	110	85	72						
Carbon Tetrachloride	Annual Avg	0.127	0.128		0.107		0.102	0.077					0.095					
	Health Risk	33	34		28		27	20					25					
Chromium, Hexavalent	Annual Avg			0.29	0.25	0.25	0.33	0.17	0.13	0.11	0.1	0.13						
	Health Risk			43	37	38	49	25	20	17	15	19						
para-Dichlorobenzene	Annual Avg			0.12	0.12	0.1	0.12	0.14	0.12				0.12					
	Health Risk			8	8	7	8	10	8				8					
Formaldehyde	Annual Avg	2.27	2	2.09	1.83	2.16	2.28	2.7	2.56	2.24	2.69	2.24	2.27					
	Health Risk	17	15	15	13	16	17	20	19	16	20	16	17					
Methylene Chloride	Annual Avg	0.83	6.65	0.66	0.58	0.8	0.69	0.55	0.75				0.5					
	Health Risk	3	23	2	2	3	2	2	3				2					
Perchloroethylene	Annual Avg	0.161	0.153	0.1	0.094	0.064	0.069	0.068	0.096				0.088					
	Health Risk	6	6	4	4	3	3	3	4				4					
Diesel PM	Annual Avg																	
	Health Risk																	
Total Health Risk		553	457	431	457	392	383	291	253	244	192	215	21					

No Monitoring Data Available

1 Concentrations for Hexavalent Chromium are expressed as ng/m³, and concentrations for Diesel PM are expressed as µg/m³. Concentrations for all other TACs are expressed as ppb.

2 Health Risk represents the number of excess cancer cases per million people based on a lifetime (70-year) exposure to the annual average concentration. Total Health Risk represents only those compounds listed in this table and only those with data for the year. There may be other significant compounds for which monitoring and/or health risk information are not available.

Table C-32

San Francisco Bay Area Air Basin

Santa Clara County: San Jose - Jackson Street

TAC	Conc. ¹ /Risk ²	Annual Average Concentrations and Health Risks																		
		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006		
Acetaldehyde	Annual Avg														0.84	0.82	0.78	0.82		
	Health Risk														4	4	4	4		
Benzene	Annual Avg														0.577	0.502	0.414	0.383		
	Health Risk														53	46	38	36		
1,3-Butadiene	Annual Avg														0.131	0.137	0.104	0.091		
	Health Risk														49	51	39	34		
Carbon Tetrachloride	Annual Avg														0.096					
	Health Risk														25					
Chromium, Hexavalent	Annual Avg														0.098	0.1		0.053		
	Health Risk														15	15		8		
para-Dichlorobenzene	Annual Avg														0.15	0.15	0.15	0.15		
	Health Risk														10	10	10	10		
Formaldehyde	Annual Avg														2.79	2.13	1.71	1.88		
	Health Risk														21	16	13	14		
Methylene Chloride	Annual Avg														0.19	0.16	0.13	0.14		
	Health Risk														<1	<1	<1	<1		
Perchloroethylene	Annual Avg														0.04	0.037	0.032	0.029		
	Health Risk														2	1	1	1		
Diesel PM	Annual Avg	No Monitoring Data Available															179	143	105	107
Total Health Risk																				

1 Concentrations for Hexavalent Chromium are expressed as ng/m³, and concentrations for Diesel PM are expressed as µg/m³. Concentrations for all other TACs are expressed as ppb.

2 Health Risk represents the number of excess cancer cases per million people based on a lifetime (70-year) exposure to the annual average concentration. Total Health Risk represents only those compounds listed in this table and only those with data for the year. There may be other significant compounds for which monitoring and/or health risk information are not available.

Table C-33

San Joaquin Valley Air Basin

Air Basin Summary

TAC	Conc. ¹ /Risk ²	Annual Average Concentrations and Health Risks																
		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Acetaldehyde	Annual Avg	1.94	1.84	1.38	1.73	1.29	0.54	1.28	1.19	1.3	1.56	1.09	1.15	1.24	1.34	1.14	1.42	1.33
	Health Risk	9	9	7	8	6	3	6	6	6	8	5	6	6	7	6	7	6
Benzene	Annual Avg	2.45	2.11	1.36	1.32	1.33	1.16	0.73	0.71	0.76	0.69	0.63	0.538	0.552	0.463	0.372	0.374	0.362
	Health Risk	227	196	126	122	123	107	68	66	71	64	58	50	51	43	34	35	34
1,3-Butadiene	Annual Avg	0.409	0.36	0.236	0.339	0.323	0.264	0.222	0.195	0.233	0.177	0.158	0.15	0.146	0.095	0.08	0.082	0.069
	Health Risk	154	135	89	127	121	99	83	73	88	67	59	56	55	36	30	31	26
Carbon Tetrachloride	Annual Avg	0.128	0.129		0.109		0.098	0.077		0.114		0.096	0.086	0.091	0.097			
	Health Risk	34	34		29		26	20		30		25	23	24	26			
Chromium, Hexavalent	Annual Avg			0.23	0.21	0.19	0.28	0.13	0.11	0.1	0.1	0.12		0.086	0.078	0.083	0.076	0.05
	Health Risk			34	31	29	42	20	16	15	15	18		13	12	13	11	8
para-Dichlorobenzene	Annual Avg		0.11	0.11	0.13	0.11	0.11	0.1	0.13			0.11	0.13	0.15	0.15	0.15	0.15	0.15
	Health Risk		7	7	9	7	8	7	9			7	9	10	10	10	10	10
Formaldehyde	Annual Avg	2.45	1.81	1.46	1.67	1.8	2.1	2.96	2.77	2.86	3.44	2.61	3.08	3.13	3.02	2.27	2.52	2.78
	Health Risk	18	13	11	12	13	15	22	20	21	25	19	23	23	22	17	19	20
Methylene Chloride	Annual Avg	0.76	0.59	0.55	0.76	0.59	0.61	0.54	0.53	0.52	0.5	0.53	0.27	0.16	0.14	0.11	0.12	0.11
	Health Risk	3	2	2	3	2	2	2	2	2	2	2	<1	<1	<1	<1	<1	<1
Perchloroethylene	Annual Avg	0.126	0.133	0.104	0.473	0.067	0.068	0.068	0.056	0.039		0.076	0.052	0.039	0.033	0.027	0.032	0.032
	Health Risk	5	5	4	19	3	3	3	2	2		3	2	2	1	1	1	1
Diesel PM ³	Annual Avg	(2.6)					(1.7)					(1.3)						
	Health Risk	(780)					(510)					(390)						
Average Basin Risk	w/o Diesel PM	450	401	280	360	304	305	231	194	235	181	196	169	184	157	111	114	105
	w/ Diesel PM	(1230)					(815)					(586)						

1 Concentrations for Hexavalent Chromium are expressed as ng/m³, and concentrations for Diesel PM are expressed as µg/m³. Concentrations for all other TACs are expressed as ppb.

2 Health Risk represents the number of excess cancer cases per million people based on a lifetime (70-year) exposure to the annual average concentration. Total Health Risk represents only those compounds listed in this table and only those with data for the year. There may be other significant compounds for which monitoring and/or health risk information are not available.

3 The Diesel PM concentrations are estimates based on receptor modeling, and they are available for selected years. Currently, the Diesel PM estimates are being reviewed.

Table C-34

San Joaquin Valley Air Basin

Kern County: Bakersfield - Chester Avenue

TAC	Conc. ¹ /Risk ²	Annual Average Concentrations and Health Risks															
		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Acetaldehyde	Annual Avg	1.87	1.83	1.6	2												
	Health Risk	9	9	8	10												
Benzene	Annual Avg	2.68	2.22	1.54	1.47												
	Health Risk	248	205	143	136												
1,3-Butadiene	Annual Avg	0.389	0.306	0.24	0.327												
	Health Risk	146	115	90	123												
Carbon Tetrachloride	Annual Avg	0.127	0.125		0.104												
	Health Risk	33	33		27												
Chromium, Hexavalent	Annual Avg			0.21	0.21												
	Health Risk			31	31												
para-Dichlorobenzene	Annual Avg			0.12	0.17												
	Health Risk			8	11												
Formaldehyde	Annual Avg	2.44	1.62	1.36	1.85												
	Health Risk	18	12	10	14												
Methylene Chloride	Annual Avg	0.92	0.65	0.52	0.99												
	Health Risk	3	2	2	3												
Perchloroethylene	Annual Avg	0.087	0.127	0.075	1.48												
	Health Risk	3	5	3	59												
Diesel PM	Annual Avg																
	Health Risk																
Total Health Risk		460	381	295	414												

1 Concentrations for Hexavalent Chromium are expressed as ng/m³, and concentrations for Diesel PM are expressed as µg/m³. Concentrations for all other TACs are expressed as ppb.

2 Health Risk represents the number of excess cancer cases per million people based on a lifetime (70-year) exposure to the annual average concentration. Total Health Risk represents only those compounds listed in this table and only those with data for the year. There may be other significant compounds for which monitoring and/or health risk information are not available.

Table C-35

Appendix C

San Joaquin Valley Air Basin

Kern County: Bakersfield - 5558 California Avenue

TAC	Conc. ¹ /Risk ²	Annual Average Concentrations and Health Risks																
		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Acetaldehyde	Annual Avg						0.49	1.59	1.22	1.27	1.69	1.19	1.27	1.37	1.51		1.65	1.43
	Health Risk						2	8	6	6	8	6	6	7	7		8	7
Benzene	Annual Avg						1.14	0.78	0.57	0.7	0.71	0.58	0.549	0.506	0.405		0.355	0.383
	Health Risk						106	72	53	65	66	54	51	47	37		33	35
1,3-Butadiene	Annual Avg						0.206	0.211	0.16	0.2	0.153	0.126	0.138	0.099	0.063		0.062	0.063
	Health Risk						78	79	60	75	58	47	52	37	24		23	24
Carbon Tetrachloride	Annual Avg						0.099	0.079				0.094	0.086	0.092	0.095			
	Health Risk						26	21				25	23	24	25			
Chromium, Hexavalent	Annual Avg						0.26	0.13	0.1	0.1	0.1	0.1		0.078	0.053		0.045	0.03
	Health Risk						39	19	15	15	16	16		12	8		7	5
para-Dichlorobenzene	Annual Avg						0.11	0.11	0.12			0.11	0.13	0.15	0.15		0.15	0.15
	Health Risk						7	7	8			7	9	10	10		10	10
Formaldehyde	Annual Avg						1.92	3.48	3.12	2.99	3.67	2.79	3.44	3.15	3.43		2.61	2.77
	Health Risk						14	26	23	22	27	21	25	23	25		19	20
Methylene Chloride	Annual Avg						0.54	0.64	0.5		0.5	0.58	0.26	0.1	0.11		0.09	0.09
	Health Risk						2	2	2		2	2	<1	<1	<1		<1	<1
Perchloroethylene	Annual Avg						0.092	0.119	0.039			0.065	0.058	0.047	0.037		0.043	0.056
	Health Risk						4	5	2			3	2	2	1		2	2
Diesel PM	Annual Avg																	
	Health Risk																	
Total Health Risk							278	239	169	183	177	181	168	162	137		102	103

1 Concentrations for Hexavalent Chromium are expressed as ng/m³, and concentrations for Diesel PM are expressed as µg/m³. Concentrations for all other TACs are expressed as ppb.

2 Health Risk represents the number of excess cancer cases per million people based on a lifetime (70-year) exposure to the annual average concentration. Total Health Risk represents only those compounds listed in this table and only those with data for the year. There may be other significant compounds for which monitoring and/or health risk information are not available.

Table C-36

San Joaquin Valley Air Basin

Fresno County: Fresno - 1st Street

Annual Average Concentrations and Health Risks																		
TAC	Conc. ¹ /Risk ²	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Acetaldehyde	Annual Avg		2.29		1.89	1.4	0.67			1.5		1.43	1.6	1.55	1.71	1.27	1.63	1.63
	Health Risk		11		9	7	3			7		7	8	8	8	6	8	8
Benzene	Annual Avg	2.42	1.34	1.35	1.44	1.24	0.79	1	0.83	0.8	0.73	0.61	0.631	0.546	0.403	0.408	0.387	
	Health Risk	224	124	125	133	115	73	92	76	74	68	56	58	51	37	38	36	
1,3-Butadiene	Annual Avg	0.459	0.262	0.342	0.356	0.3	0.234	0.233	0.265	0.214	0.195	0.182	0.194	0.127	0.098	0.101	0.082	
	Health Risk	173	99	129	134	113	88	87	100	80	73	68	73	48	37	38	31	
Carbon Tetrachloride	Annual Avg	0.122		0.108		0.099	0.078					0.095	0.086	0.089	0.097			
	Health Risk	32		28		26	21					25	23	23	26			
Chromium, Hexavalent	Annual Avg		0.21	0.15	0.14	0.22	0.1	0.11	0.1	0.1	0.13		0.058	0.05	0.073	0.063	0.058	
	Health Risk		31	22	21	33	16	16	15	15	20		9	8	11	9	9	
para-Dichlorobenzene	Annual Avg		0.1	0.1	0.14	0.13	0.11	0.14				0.1	0.14	0.15	0.15	0.15	0.15	
	Health Risk		7	7	9	8	7	9				7	9	10	10	10	10	
Formaldehyde	Annual Avg	2.32		1.64	2.01	2.41			3.42		3.56	4.32	4.16	3.72	2.57	3	3.41	
	Health Risk	17		12	15	18			25		26	32	31	27	19	22	25	
Methylene Chloride	Annual Avg	0.62	0.54	0.69	0.59	0.58	0.5	0.52			0.5	0.27	0.24	0.15	0.14	0.15	0.14	
	Health Risk	2	2	2	2	2	2	2			2	<1	<1	<1	<1	<1	<1	
Perchloroethylene	Annual Avg	0.142	0.102	0.1	0.062	0.065	0.041	0.043			0.056	0.046	0.034	0.031	0.023	0.028	0.02	
	Health Risk	6	4	4	2	3	2	2			2	2	1	1	<1	1	<1	
Diesel PM	Annual Avg																	
	Health Risk																	
Total Health Risk		465	267	338	323	321	209	208	223	169	230	198	213	179	120	126	119	

1 Concentrations for Hexavalent Chromium are expressed as ng/m³, and concentrations for Diesel PM are expressed as µg/m³. Concentrations for all other TACs are expressed as ppb.

2 Health Risk represents the number of excess cancer cases per million people based on a lifetime (70-year) exposure to the annual average concentration. Total Health Risk represents only those compounds listed in this table and only those with data for the year. There may be other significant compounds for which monitoring and/or health risk information are not available.

Table C-37

San Joaquin Valley Air Basin

Stanislaus County: Modesto - I Street (Courthouse)

TAC	Conc. ¹ /Risk ²	Annual Average Concentrations and Health Risks															
		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Acetaldehyde	Annual Avg		1.51	1.37	1.75	1.44	0.51	1.17	1.25								
	Health Risk		7	7	8	7	2	6	6								
Benzene	Annual Avg																
	Health Risk																
1,3-Butadiene	Annual Avg																
	Health Risk																
Carbon Tetrachloride	Annual Avg																
	Health Risk																
Chromium, Hexavalent	Annual Avg		0.27	0.23	0.22	0.32	0.16	0.11									
	Health Risk		40	34	33	48	25	17									
para-Dichlorobenzene	Annual Avg																
	Health Risk																
Formaldehyde	Annual Avg	1.43	1.32	1.82	1.86	2.16	2.58	2.43									
	Health Risk	11	10	13	14	16	19	18									
Methylene Chloride	Annual Avg																
	Health Risk																
Perchloroethylene	Annual Avg																
	Health Risk																
Diesel PM	Annual Avg																
	Health Risk																
Total Health Risk		18	57	55	54	66	50	41									

No Monitoring Data Available

1 Concentrations for Hexavalent Chromium are expressed as ng/m³, and concentrations for Diesel PM are expressed as µg/m³. Concentrations for all other TACs are expressed as ppb.

2 Health Risk represents the number of excess cancer cases per million people based on a lifetime (70-year) exposure to the annual average concentration. Total Health Risk represents only those compounds listed in this table and only those with data for the year. There may be other significant compounds for which monitoring and/or health risk information are not available.

Table C-38

San Joaquin Valley Air Basin

Stanislaus County: Modesto - 14th Street

TAC	Conc. ¹ /Risk ²	Annual Average Concentrations and Health Risks															
		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Acetaldehyde	Annual Avg											1.65					
	Health Risk											8					
Benzene	Annual Avg	2.25	1.86	1.2	1.23	1.14	1.2	0.7	0.77	0.85	0.61						
	Health Risk	208	172	111	114	105	111	65	71	78	56						
1,3-Butadiene	Annual Avg	0.379	0.353	0.224	0.348	0.293	0.298	0.236	0.208	0.26	0.162						
	Health Risk	142	133	84	131	110	112	89	78	98	61						
Carbon Tetrachloride	Annual Avg	0.128	0.132		0.112		0.094	0.074		0.113							
	Health Risk	34	35		30		25	20		30							
Chromium, Hexavalent	Annual Avg											0.1					
	Health Risk											15					
para-Dichlorobenzene	Annual Avg		0.11	0.1	0.12	0.1	0.11	0.1	0.15								
	Health Risk		7	7	8	7	7	7	10								
Formaldehyde	Annual Avg											3.09					
	Health Risk											23					
Methylene Chloride	Annual Avg	0.65	0.61	0.55	0.65	0.62	0.58	0.5	0.59	0.51							
	Health Risk	2	2	2	2	2	2	2	2	2							
Perchloroethylene	Annual Avg	0.145	0.15	0.118	0.109	0.087	0.053	0.044	0.052	0.035							
	Health Risk	6	6	5	4	3	2	2	2	1							
Diesel PM	Annual Avg																
	Health Risk																
Total Health Risk		392	355	209	289	227	259	185	163	209	163						

1 Concentrations for Hexavalent Chromium are expressed as ng/m³, and concentrations for Diesel PM are expressed as µg/m³. Concentrations for all other TACs are expressed as ppb.

2 Health Risk represents the number of excess cancer cases per million people based on a lifetime (70-year) exposure to the annual average concentration. Total Health Risk represents only those compounds listed in this table and only those with data for the year. There may be other significant compounds for which monitoring and/or health risk information are not available.

Table C-39

Appendix C

San Joaquin Valley Air Basin

San Joaquin County: Stockton - Hazelton Street

TAC	Conc. ¹ /Risk ²	Annual Average Concentrations and Health Risks																
		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Acetaldehyde	Annual Avg	1.47	1.75	1.07	1.31	1.1		0.9	0.9	1	1.07	0.64	0.59	0.8	0.81	0.87	0.99	0.93
	Health Risk	7	9	5	6	5		4	4	5	5	3	3	4	4	4	5	5
Benzene	Annual Avg	2.01	1.95	1.37		1.23	1.05	0.64	0.52	0.69	0.65	0.58	0.454	0.521	0.437	0.37	0.358	0.317
	Health Risk	186	181	127		113	97	60	48	64	60	54	42	48	40	34	33	29
1,3-Butadiene	Annual Avg	0.336	0.321	0.217		0.281	0.25	0.206	0.181	0.206	0.18	0.155	0.13	0.146	0.096	0.079	0.085	0.063
	Health Risk	126	121	82		106	94	77	68	77	68	58	49	55	36	30	32	24
Carbon Tetrachloride	Annual Avg	0.131	0.136				0.099	0.077		0.115		0.098	0.087	0.091	0.098			
	Health Risk	35	36				26	20		30		26	23	24	26			
Chromium, Hexavalent	Annual Avg		0.22	0.25	0.25		0.14				0.1	0.12		0.123	0.13	0.123	0.12	0.063
	Health Risk		33	37	37		21				15	18		18	20	18	18	9
para-Dichlorobenzene	Annual Avg	0.1	0.1		0.1	0.11	0.1	0.11				0.11	0.13	0.15	0.15	0.15	0.15	0.15
	Health Risk	7	7		7	7	7	7				7	9	10	10	10	10	10
Formaldehyde	Annual Avg	1.81	1.88	1.24	1.38	1.56		2.35	2.24	2.33	2.68	1.61	1.48	2.07	1.91	1.79	1.94	2.16
	Health Risk	13	14	9	10	12		17	16	17	20	12	11	15	14	13	14	16
Methylene Chloride	Annual Avg	0.63	0.5	0.6		0.5	0.75	0.53	0.5	0.5	0.5	0.53	0.27	0.14	0.16	0.12	0.12	0.11
	Health Risk	2	2	2		2	3	2	2	2	2	2	<1	<1	<1	<1	<1	<1
Perchloroethylene	Annual Avg	0.129	0.113	0.12		0.066	0.061	0.068	0.09	0.033		0.108	0.053	0.035	0.03	0.022	0.024	0.018
	Health Risk	5	5	5		3	2	3	4	1		4	2	1	1	<1	1	<1
Diesel PM	Annual Avg	No Monitoring Data Available																
Total Health Risk		374	375	270	53	285	229	211	149	196	170	184	139	175	151	109	113	93

¹ Concentrations for Hexavalent Chromium are expressed as ng/m³, and concentrations for Diesel PM are expressed as µg/m³. Concentrations for all other TACs are expressed as ppb.

² Health Risk represents the number of excess cancer cases per million people based on a lifetime (70-year) exposure to the annual average concentration. Total Health Risk represents only those compounds listed in this table and only those with data for the year. There may be other significant compounds for which monitoring and/or health risk information are not available.

San Diego Air Basin

Air Basin Summary

TAC	Conc. ¹ /Risk ²	Annual Average Concentrations and Health Risks																	
		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	
Acetaldehyde	Annual Avg	1.33	1.5	1.22	1.41	1.48	0.64	1.03	1	0.86	1.04	0.84	0.95	0.97	0.89	0.89	1.01	0.85	
	Health Risk	6	7	6	7	7	3	5	5	4	5	4	5	5	4	4	5	4	
Benzene	Annual Avg	2.25	1.7	1.48	1.16	1.39	0.98	0.76	0.76	0.76	0.86	0.65	0.505	0.491	0.483	0.371	0.404	0.362	
	Health Risk	208	158	137	107	129	90	71	70	70	79	60	47	45	45	34	37	34	
1,3-Butadiene	Annual Avg	0.333	0.257	0.258	0.312	0.307	0.242	0.208	0.198	0.196	0.22	0.159	0.136	0.12	0.089	0.074	0.073	0.068	
	Health Risk	125	97	97	117	115	91	78	75	74	83	60	51	45	33	28	27	26	
Carbon Tetrachloride	Annual Avg	0.132	0.127		0.103		0.099	0.077				0.094	0.086	0.092	0.093				
	Health Risk	35	34		27		26	20				25	23	24	25				
Chromium, Hexavalent	Annual Avg			0.24	0.19	0.16	0.18	0.11	0.11	0.1	0.1	0.1		0.045	0.05	0.03	0.043	0.05	
	Health Risk			36	28	23	27	16	16	15	15	15		7	8	5	6	8	
para-Dichlorobenzene	Annual Avg		0.1	0.11	0.13	0.15	0.12	0.11	0.13				0.15	0.15	0.15	0.15	0.15	0.15	
	Health Risk		7	8	8	10	8	7	8				10	10	10	10	10	10	
Formaldehyde	Annual Avg	1.64	1.53	1.26	1.76	2.25	2.13	2.62	2.62	2.27	2.67	2.23	2.59	2.99	2.68	2.19	2.42	2.08	
	Health Risk	12	11	9	13	17	16	19	19	17	20	16	19	22	20	16	18	15	
Methylene Chloride	Annual Avg	0.59	0.83	1.34	1.13	0.73	0.63	0.59	0.57		0.53	0.76	0.17	0.16	0.16	0.13	0.14	0.14	
	Health Risk	2	3	5	4	3	2	2	2		2	3	<1	<1	<1	<1	<1	<1	
Perchloroethylene	Annual Avg	0.282	0.269	0.263	0.2	0.207	0.249	0.147	0.125			0.089	0.061	0.06	0.047	0.037	0.041	0.037	
	Health Risk	11	11	11	8	8	10	6	5			4	2	2	2	1	2	1	
Diesel PM ³	Annual Avg	(2.9)					(1.9)					(1.4)							
	Health Risk	(870)					(570)					(420)							
Average Basin Risk	w/o Diesel PM	399	328	309	319	312	273	224	200	180	204	187	157	160	147	98	105	98	
	w/ Diesel PM	(1269)					(843)					(607)							

1 Concentrations for Hexavalent Chromium are expressed as ng/m³, and concentrations for Diesel PM are expressed as µg/m³. Concentrations for all other TACs are expressed as ppb.

2 Health Risk represents the number of excess cancer cases per million people based on a lifetime (70-year) exposure to the annual average concentration. Total Health Risk represents only those compounds listed in this table and only those with data for the year. There may be other significant compounds for which monitoring and/or health risk information are not available.

3 The Diesel PM concentrations are estimates based on receptor modeling, and they are available for selected years. Currently, the Diesel PM estimates are being reviewed.

Table C-41

San Diego Air Basin

San Diego County: Chula Vista

TAC	Conc. ¹ /Risk ²	Annual Average Concentrations and Health Risks																
		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Acetaldehyde	Annual Avg	1.1	1.21	0.99	1.16	1.32	0.64	0.83	0.91	0.7	0.91	0.75	0.78	0.75	0.72	0.74	0.86	0.71
	Health Risk	5	6	5	6	6	3	4	4	3	4	4	4	4	3	4	4	3
Benzene	Annual Avg	2	1.21	1.03	0.8	1.08	0.81		0.63	0.61		0.55	0.421	0.419		0.341	0.358	
	Health Risk	186	112	95	74	100	75		58	56		51	39	39		32	33	
1,3-Butadiene	Annual Avg	0.278	0.183	0.184	0.225	0.262	0.205		0.162	0.153		0.136	0.11	0.107		0.07	0.064	
	Health Risk	105	69	69	85	98	77		61	57		51	41	40		26	24	
Carbon Tetrachloride	Annual Avg	0.132	0.129		0.101		0.097					0.093	0.086	0.091				
	Health Risk	35	34		27		26					25	23	24				
Chromium, Hexavalent	Annual Avg			0.24	0.2	0.17	0.2	0.11	0.1	0.1	0.11	0.1		0.05	0.063	0.03	0.038	0.03
	Health Risk			37	30	25	29	16	15	15	16	16		8	9	5	6	5
para-Dichlorobenzene	Annual Avg	0.1	0.11	0.13	0.12	0.11		0.13					0.15	0.15		0.15	0.15	
	Health Risk	7	7	8	8	7		8					10	10		10	10	
Formaldehyde	Annual Avg	1.26	1.3	1.1	1.46	2.08	1.81	2.1	2.37	2	2.49	2.14	2.54	2.56	2.3	1.93	2.08	1.88
	Health Risk	9	10	8	11	15	13	15	17	15	18	16	19	19	17	14	15	14
Methylene Chloride	Annual Avg	0.58	0.59	0.81	1.01	0.57	0.57		0.62			0.65	0.16	0.13		0.12	0.13	
	Health Risk	2	2	3	3	2	2		2			2	<1	<1		<1	<1	
Perchloroethylene	Annual Avg	0.236	0.229	0.208	0.144	0.132	0.146		0.103			0.078	0.057	0.048		0.031	0.036	
	Health Risk	9	9	8	6	5	6		4			3	2	2		1	1	
Diesel PM	Annual Avg	No Monitoring Data Available																
Total Health Risk		351	249	232	250	259	238	35	169	146	38	168	138	146	29	92	93	22

1 Concentrations for Hexavalent Chromium are expressed as ng/m³, and concentrations for Diesel PM are expressed as µg/m³. Concentrations for all other TACs are expressed as ppb.

2 Health Risk represents the number of excess cancer cases per million people based on a lifetime (70-year) exposure to the annual average concentration. Total Health Risk represents only those compounds listed in this table and only those with data for the year. There may be other significant compounds for which monitoring and/or health risk information are not available.

Table C-42

San Diego Air Basin

San Diego County: El Cajon - Redwood Avenue

Annual Average Concentrations and Health Risks																		
TAC	Conc. ¹ /Risk ²	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Acetaldehyde	Annual Avg	1.56	1.78	1.46	1.66			1.23			1.17	0.92	1.11	1.2	1.06	1.04	1.16	0.99
	Health Risk	8	9	7	8			6			6	4	5	6	5	5	6	5
Benzene	Annual Avg	2.5	2.2	1.94	1.51		1.14	0.86	0.89	0.91	0.98	0.74	0.588	0.563	0.561	0.402	0.449	0.399
	Health Risk	231	203	179	140		106	79	82	84	91	69	54	52	52	37	42	37
1,3-Butadiene	Annual Avg	0.387	0.332	0.331	0.398		0.279	0.252	0.235	0.24	0.24	0.182	0.162	0.133	0.101	0.077	0.082	0.073
	Health Risk	145	125	125	150		105	95	88	90	90	68	61	50	38	29	31	28
Carbon Tetrachloride	Annual Avg	0.131	0.125				0.1	0.078				0.095	0.086	0.093	0.093			
	Health Risk	35	33				27	21				25	23	24	24			
Chromium, Hexavalent	Annual Avg			0.24	0.18			0.1	0.11		0.1	0.1		0.04	0.038		0.048	0.07
	Health Risk			36	26			16	17		15	15		6	6		7	11
para-Dichlorobenzene	Annual Avg			0.12	0.13		0.12	0.11	0.13				0.15	0.15	0.15	0.15	0.15	0.15
	Health Risk			8	8		8	7	8				10	10	10	10	10	10
Formaldehyde	Annual Avg	2.01	1.76	1.42	2.06			3.14			2.84	2.32	2.63	3.41	3.05	2.45	2.76	2.28
	Health Risk	15	13	10	15			23			21	17	19	25	22	18	20	17
Methylene Chloride	Annual Avg	0.59	1.07	1.87	1.25		0.7	0.61	0.52		0.52	0.87	0.19	0.18	0.18	0.14	0.14	0.17
	Health Risk	2	4	7	4		2	2	2		2	3	<1	<1	<1	<1	<1	<1
Perchloroethylene	Annual Avg	0.329	0.308	0.319	0.256		0.352	0.168	0.147			0.1	0.065	0.072	0.059	0.043	0.045	0.04
	Health Risk	13	12	13	10		14	7	6			4	3	3	2	2	2	2
Diesel PM	Annual Avg																	
	Health Risk																	
Total Health Risk		449	399	385	361		262	256	203	174	225	205	175	176	159	101	118	110

1 Concentrations for Hexavalent Chromium are expressed as ng/m³, and concentrations for Diesel PM are expressed as µg/m³. Concentrations for all other TACs are expressed as ppb.

2 Health Risk represents the number of excess cancer cases per million people based on a lifetime (70-year) exposure to the annual average concentration. Total Health Risk represents only those compounds listed in this table and only those with data for the year. There may be other significant compounds for which monitoring and/or health risk information are not available.

Table C-43

Appendix C

Sacramento Valley Air Basin

Air Basin Summary

TAC	Conc. ¹ /Risk ²	Annual Average Concentrations and Health Risks																	
		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	
Acetaldehyde	Annual Avg	1.29			1.37	1.04	0.39	1.03	1.05	0.92	1.23	0.83	0.74	1.14	1.04	1.09	1.15	0.92	
	Health Risk	6			7	5	2	5	5	4	6	4	4	6	5	5	6	4	
Benzene	Annual Avg	2.02	1.88	1.35	1	1.02	0.8	0.56	0.55	0.5	0.56	0.45	0.422	0.443	0.406	0.406	0.335	0.268	
	Health Risk	187	174	125	92	95	74	51	51	47	52	42	39	41	38	38	31	25	
1,3-Butadiene	Annual Avg	0.378	0.332	0.283	0.288	0.221	0.186	0.176	0.16	0.154	0.128	0.119	0.125	0.116	0.094	0.093	0.08	0.051	
	Health Risk	142	125	106	108	83	70	66	60	58	48	45	47	44	35	35	30	19	
Carbon Tetrachloride	Annual Avg	0.123	0.123		0.109		0.099	0.078				0.094	0.088	0.09	0.093				
	Health Risk	33	32		29		26	21				25	23	24	25				
Chromium, Hexavalent	Annual Avg			0.17	0.14	0.13	0.18	0.11	0.1	0.1	0.1	0.1	0.1	0.1	0.053	0.05	0.068	0.058	0.041
	Health Risk			26	21	19	26	16	15	15	15	15	15	15	8	8	10	9	6
para-Dichlorobenzene	Annual Avg			0.11	0.1	0.2	0.14	0.11	0.14				0.1	0.13	0.15	0.15	0.15	0.15	0.15
	Health Risk			7	7	14	9	7	10				7	9	10	10	10	10	10
Formaldehyde	Annual Avg	1.57			1.77	1.75	1.91	2.76	2.92	2.52	3.61	2.51	2.41	3.79	3.53	2.76	2.68	2.54	
	Health Risk	12			13	13	14	20	22	19	27	18	18	28	26	20	20	19	
Methylene Chloride	Annual Avg	0.65	0.56	0.55	0.98	0.66	0.53	0.54	0.52		0.6	0.57	0.29	0.08	0.08	0.07	0.08	0.07	
	Health Risk	2	2	2	3	2	2	2	2		2	2	1	<1	<1	<1	<1	<1	
Perchloroethylene	Annual Avg	0.071	0.074	0.063	0.052	0.165	0.049	0.055	0.052			0.058	0.027	0.025	0.018	0.015	0.021	0.015	
	Health Risk	3	3	3	2	7	2	2	2		2	1	1	<1	<1	<1	<1	<1	
Diesel PM ³	Annual Avg	(2.5)					(1.6)					(1.2)							
	Health Risk	(750)					(480)					('360)							
Average Basin Risk	w/o Diesel PM	385	336	269	282	238	225	190	167	143	150	160	157	162	147	118	106	83	
	w/ Diesel PM	(1153)					(705)					(520)							

1 Concentrations for Hexavalent Chromium are expressed as ng/m³, and concentrations for Diesel PM are expressed as µg/m³. Concentrations for all other TACs are expressed as ppb.

2 Health Risk represents the number of excess cancer cases per million people based on a lifetime (70-year) exposure to the annual average concentration. Total Health Risk represents only those compounds listed in this table and only those with data for the year. There may be other significant compounds for which monitoring and/or health risk information are not available.

3 The Diesel PM concentrations are estimates based on receptor modeling, and they are available for selected years. Currently, the Diesel PM estimates are being reviewed.

Table C-44

Sacramento Valley Air Basin

Butte County: Chico - Manzanita Avenue

		Annual Average Concentrations and Health Risks																
TAC	Conc. ¹ /Risk ²	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Acetaldehyde	Annual Avg				1.55	1.11	0.54	1.15	1.17	0.96	1.41	0.89	1.1	1.33	1.14	1.32	1.4	1
	Health Risk				8	5	3	6	6	5	7	4	5	6	6	6	7	5
Benzene	Annual Avg				1.1	1.14	0.85	0.67		0.55	0.64	0.52	0.499	0.544	0.449	0.533	0.427	0.297
	Health Risk				102	106	78	62		51	59	48	46	50	42	49	40	28
1,3-Butadiene	Annual Avg				0.295	0.249	0.205	0.216		0.17	0.149	0.142	0.157	0.154	0.111	0.132	0.108	0.057
	Health Risk				111	94	77	81		64	56	54	59	58	42	50	41	21
Carbon Tetrachloride	Annual Avg				0.108		0.1	0.079						0.088	0.087	0.093		
	Health Risk				29		26	21						23	23	24		
Chromium, Hexavalent	Annual Avg				0.15	0.13	0.16	0.1	0.1	0.1	0.1	0.1	0.1	0.058	0.048	0.075	0.058	0.038
	Health Risk				23	19	24	16	15	15	15	15	15	9	7	11	9	6
para-Dichlorobenzene	Annual Avg				0.1	0.13	0.1	0.12						0.13	0.15	0.15	0.15	0.15
	Health Risk				7	8	7	8						9	10	10	10	10
Formaldehyde	Annual Avg				2.08	1.78	2.04	2.99	3.42	2.63	4.15	2.76	3.25	4.47	3.82	3.4	3.28	2.63
	Health Risk				15	13	15	22	25	19	31	20	24	33	28	25	24	19
Methylene Chloride	Annual Avg				0.81	0.5	0.53	0.58						0.36	0.09	0.07	0.08	0.09
	Health Risk				3	2	2	2						1	<1	<1	<1	<1
Perchloroethylene	Annual Avg				0.057	0.265	0.047	0.049						0.024	0.024	0.015	0.014	0.028
	Health Risk				2	11	2	2						<1	1	<1	<1	1
Diesel PM	Annual Avg																	
	Health Risk													No Monitoring Data Available				
Total Health Risk					300	258	234	220	46	154	168	141	182	190	159	151	131	89

1 Concentrations for Hexavalent Chromium are expressed as ng/m³, and concentrations for Diesel PM are expressed as µg/m³. Concentrations for all other TACs are expressed as ppb.

2 Health Risk represents the number of excess cancer cases per million people based on a lifetime (70-year) exposure to the annual average concentration. Total Health Risk represents only those compounds listed in this table and only those with data for the year. There may be other significant compounds for which monitoring and/or health risk information are not available.

Table C-45

Sacramento Valley Air Basin**Butte County: Chico - Salem Street**

TAC	Conc. ¹ /Risk ²	Annual Average Concentrations and Health Risks															
		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Acetaldehyde	Annual Avg	1.27															
	Health Risk	6															
Benzene	Annual Avg	1.96	1.91														
	Health Risk	182	177														
1,3-Butadiene	Annual Avg	0.403	0.361														
	Health Risk	151	136														
Carbon Tetrachloride	Annual Avg	0.123	0.123														
	Health Risk	32	33														
Chromium, Hexavalent	Annual Avg																
	Health Risk																
para-Dichlorobenzene	Annual Avg																
	Health Risk																
Formaldehyde	Annual Avg	1.49															
	Health Risk	11															
Methylene Chloride	Annual Avg	0.53	0.57														
	Health Risk	2	2														
Perchloroethylene	Annual Avg	0.047	0.054														
	Health Risk	2	2														
Diesel PM	Annual Avg																
	Health Risk																
Total Health Risk		386	350														

No Monitoring Data Available

1 Concentrations for Hexavalent Chromium are expressed as ng/m³, and concentrations for Diesel PM are expressed as µg/m³. Concentrations for all other TACs are expressed as ppb.

2 Health Risk represents the number of excess cancer cases per million people based on a lifetime (70-year) exposure to the annual average concentration. Total Health Risk represents only those compounds listed in this table and only those with data for the year. There may be other significant compounds for which monitoring and/or health risk information are not available.

Table C-46

Sacramento Valley Air Basin

Placer County: Roseville - North Sunrise Boulevard

TAC	Conc. ¹ /Risk ²	Annual Average Concentrations and Health Risks																
		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Acetaldehyde	Annual Avg					0.96	0.25	0.9	0.93	0.88		0.77	0.39	0.95	0.93	0.87	0.89	0.84
	Health Risk					5	1	4	4	4		4	2	5	5	4	4	4
Benzene	Annual Avg					0.91	0.75	0.44	0.46	0.45	0.48	0.39	0.344	0.343	0.363	0.278	0.244	0.239
	Health Risk					84	70	40	42	42	44	36	32	32	34	26	23	22
1,3-Butadiene	Annual Avg					0.194	0.167	0.135	0.121	0.138	0.107	0.096	0.093	0.078	0.078	0.054	0.051	0.045
	Health Risk					73	63	51	46	52	40	36	35	29	29	20	19	17
Carbon Tetrachloride	Annual Avg					0.099	0.077					0.094	0.087	0.093	0.093			
	Health Risk					26	20					25	23	24	25			
Chromium, Hexavalent	Annual Avg					0.13	0.19	0.11	0.1	0.1	0.1	0.1		0.048	0.053	0.06	0.058	0.045
	Health Risk					19	29	16	15	15	15	15		7	8	9	9	7
para-Dichlorobenzene	Annual Avg					0.28	0.17	0.1	0.15			0.1	0.13	0.15	0.15	0.15	0.15	0.15
	Health Risk					19	11	7	10			7	9	10	10	10	10	10
Formaldehyde	Annual Avg					1.71	1.78	2.52	2.42	2.42		2.25	1.57	3.12	3.23	2.12	2.07	2.45
	Health Risk					13	13	19	18	18		17	12	23	24	16	15	18
Methylene Chloride	Annual Avg					0.82	0.54	0.5	0.5			0.52	0.23	0.08	0.09	0.06	0.08	0.06
	Health Risk					3	2	2	2			2	<1	<1	<1	<1	<1	<1
Perchloroethylene	Annual Avg					0.065	0.051	0.061	0.063			0.047	0.031	0.026	0.022	0.016	0.014	0.019
	Health Risk					3	2	2	3			2	1	1	<1	<1	<1	<1
Diesel PM	Annual Avg																	
	Health Risk																	
Total Health Risk						219	217	161	140	131	99	144	114	131	135	85	80	78

No Monitoring Data Available

1 Concentrations for Hexavalent Chromium are expressed as ng/m³, and concentrations for Diesel PM are expressed as µg/m³. Concentrations for all other TACs are expressed as ppb.

2 Health Risk represents the number of excess cancer cases per million people based on a lifetime (70-year) exposure to the annual average concentration. Total Health Risk represents only those compounds listed in this table and only those with data for the year. There may be other significant compounds for which monitoring and/or health risk information are not available.

Table C-47

Sacramento Valley Air Basin**Sacramento County: Citrus Heights - Sunrise Boulevard**

TAC	Conc. ¹ /Risk ²	Annual Average Concentrations and Health Risks															
		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Acetaldehyde	Annual Avg	1.32															
	Health Risk	6															
Benzene	Annual Avg	2.08	1.85	1.41													
	Health Risk	192	171	130													
1,3-Butadiene	Annual Avg	0.353	0.302	0.307													
	Health Risk	133	114	115													
Carbon Tetrachloride	Annual Avg	0.124	0.123														
	Health Risk	33	32														
Chromium, Hexavalent	Annual Avg																
	Health Risk																
para-Dichlorobenzene	Annual Avg			0.11													
	Health Risk			7													
Formaldehyde	Annual Avg	1.66															
	Health Risk	12															
Methylene Chloride	Annual Avg	0.76	0.54	0.5													
	Health Risk	3	2	2													
Perchloroethylene	Annual Avg	0.095	0.094	0.076													
	Health Risk	4	4	3													
Diesel PM	Annual Avg																
	Health Risk																
Total Health Risk		383	323	257													

No Monitoring Data Available

1 Concentrations for Hexavalent Chromium are expressed as ng/m³, and concentrations for Diesel PM are expressed as µg/m³. Concentrations for all other TACs are expressed as ppb.

2 Health Risk represents the number of excess cancer cases per million people based on a lifetime (70-year) exposure to the annual average concentration. Total Health Risk represents only those compounds listed in this table and only those with data for the year. There may be other significant compounds for which monitoring and/or health risk information are not available.

Table C-48